

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

ABSTRACT

The present invention relates to a method and apparatus for selectively receiving a radio frequency (RF) signal which utilizes an array of antenna elements for receiving the RF signal, a navigational controller for determining a pointing  
5 vector from coordinate information, and beam-forming electronics connected to the array of antenna elements and the navigational controller for forming reception lobes. This apparatus and method are particularly useful in the context of a Global Positioning System (GPS) for selectively receiving RF signals from GPS satellites to determine location and timing information. In one embodiment of the present  
10 invention, the phase of the elements of the array are adjusted to form selective reception lobes and constructively amplify signals within these reception lobes, increasing the signal-to-noise ratio (SNR) with respect to noise or interference signals outside the lobes. The reception lobes are advantageously positioned such that RF signals that are desired to be received are within the lobes according to the  
15 pointing vector determined by the navigational controller.